

REMARKS

The application has been amended to place the application in condition for allowance at the time of the next Official Action.

On page 14 of the specification, the term "lower" is changed to "greater" as it refers to the DCE concentration in Figures 11 and 12 so that the specification is consistent with the figures.

Claims 1-10 were previously pending in the application. Claims 1-4 and 6-10 are canceled and new claims 11-13 are added. Therefore, claims 5 and 11-13 are presented for consideration.

Claims 1, 2, 4, 5 and 9 are rejected as anticipated by OLSEN 6,150,234.

Reconsideration and withdrawal of the rejection are respectfully requested because the reference does not disclose or suggest that halogen oxidation is carried out at a temperature between 850 and 950°C as recited.

OLSEN at column 2, line 66 through column 3, line 1 teaches a method of oxidizing side walls of a trench 51. However, the oxidation of OLSEN is carried out at a temperature of 1,075°C in oxygen plus $C_2H_2Cl_2$. OLSEN does not teach or suggest that halogen oxidation is carried out at a temperature between 850 and 950°C.

As the reference does not disclose that which is recited, the anticipation rejection is not viable.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-3, 5 and 8 are rejected as anticipated by CHANG et al. 6,566,224.

Reconsideration and withdrawal of the rejection are respectfully requested because the reference does not disclose or suggest the step of carrying out halogen oxidation of a trench using DCE and oxygen, the halogen oxidation being carried out at a temperature between 850 and 950°C as recited in claim 5.

CHANG et al. at column 4, lines 39-44 teach forming a thermal liner at a temperature of about 900 to 1,100°C in an atmosphere of 100% oxygen. CHANG et al. at column 5, lines 6-19 teach an oxidation step using 99% oxygen and 1% DCE. However, this oxidation step is performed in a temperature range of 950°C to about 1,100°C.

CHANG et al. do not teach or suggest halogen oxidation at a temperature between 850 and 950°C as recited in claim 5. Rather, column 5, lines 20-25 of CHANG et al. teach that temperatures higher than 950°C are required to achieve the rounded edges necessary in the invention of CHANG et al.

As the reference does not disclose that which is recited and teaches away from using temperatures in the recited range, the rejection to CHANG et al. is not viable and should be withdrawn.

Claims 3, 8 and 10 are rejected as unpatentable over OLSEN in view of CHANG et al. Claims 3, 8 and 10 are canceled such that this rejection is believed moot.

Claim 6 is rejected as unpatentable over OLSEN in view of CHAU et al. 5,891,809. The cancellation of claim 6 is believed to render this rejection moot.

Claim 7 is rejected as unpatentable over OLSEN in view of CHAU et al. and further in view of CHANG et al. The cancellation of claim 7 is believed to render this rejection moot.

New claim 11 also includes the limitation that the halogen oxidation is carried out at a temperature between 850 and 950°C. The analysis above regarding claim 5 is equally applicable to claim 11. Claims 12 and 13 depend from claim 11 and further define the invention and are also believed patentable over the cited prior art.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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